



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,005	09/12/2003	Kevin J. Gierl		8610
7590	05/25/2006		EXAMINER	
William L. Krayer 1771 Helen Drive Pittsburgh, PA 15216			REDMAN, JERRY E	
			ART UNIT	PAPER NUMBER
				3634

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/662,005	GIERL ET AL.	
	Examiner	Art Unit	
	Jerry Redman	3634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 02 May 2006.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

Claims 1- 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, lines 4-5, the phraseology “susceptible of bending to bend said axis” is not readily understood by the Examiner. How can an axis bend? The support member is capable of bending along an axis but the “axis” itself does not bend per se. In claim 13, lines 8 and 9, the phraseology “to bend said axis” and “to straighten said axis” is not readily understood by the Examiner for the reasons stated above. In claim 20, line 8, the phraseology “to bend said axis” is not readily understood by the Examiner for the reasons stated above. There is a lack of antecedent basis for the following: In claim 20, line 1, “the path”.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

As best understood, claims 1-3, 6-9, 13-15, and 19-20 are further rejected under 35 U.S.C. 102(b) as being anticipated by Simmons ('046). Simmons ('046) discloses a sensing element device (10) in a doorway comprising a base (32), a generally elongated flexible support member (30, 28, and 24) having a base end (34) fastened to the base (32) and a working end (24) having an infrared light beam sensing element (i.e., a passive radiation element) being hardwire connected (column 3, lines 33-34) and oriented 90 degrees from the support member (30, 28, and 24).

As best understood, claims 1-3, 6-10, 13-15, and 18-20 are further rejected under 35 U.S.C. 102(b) as being anticipated by Strand ('417). Strand ('417) discloses a flexible sensing element device (10) comprising a base (102), a generally elongated flexible support member (44) having a base end (34 and 36) connected to the base at slots (46 and 48) and a working end (the portion that extends below the base end), a photocell sensing element (56, i.e., a passive radiation element) having a hardwire connection (59) and oriented 90 degrees from the support member (44).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

As best understood, claims 10 and 18 are further rejected under 35 U.S.C. 103(a) as being unpatentable over Simmons ('046) in view of Larsson ('608). All of the elements of the instant invention are discussed in detail above except providing the sensing element to be a photocell. Larsson ('608) discloses a photocell-sensing element for a doorway. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the sensing of Simmons ('046) to be a photocell as taught by Larsson ('608) since photocell sensors can extend more accurately over a longer distance.

As best understood, claims 4, 5, 16, and 17 are further rejected under 35 U.S.C. 103(a) as being unpatentable over Strand ('417) in view of Levin et al. ('509). All of the elements of the instant invention are discussed in detail above except providing the support member to have a Shore hardness between 40-80 and more specifically between 50-70. Levin et al. ('509) disclose a sensor support (102) having a Shore hardness of 55 (column 4, lines 29-35). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the support member of Strand ('417) to have a Shore hardness of 55 as taught by Levin et al. ('509) since a Shore hardness of 55 would allow the support member to resiliently flex back to it's original shape upon being deformed.

As best understood, claims 11 and 12 are further rejected under 35 U.S.C. 103(a) as being unpatentable over Simmons ('046) in view of Evans ('226). All of the elements of the instant invention are discussed in detail above except providing the sensing element to be microwave or ultrasonic. Evans ('226) discloses a sensing system using microwave or ultrasonic waves. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the sensor element of Simmons ('046) to be microwave or ultrasonic as taught by Evans ('226) since microwave and ultrasonic generate a greater number of beams/pulses and therefore improves the accuracy of detecting an object in a path.

As best understood, claims 11 and 12 are further rejected under 35 U.S.C. 103(a) as being unpatentable over Strand ('417) in view of Evans ('226). All of the elements of the instant invention are discussed in detail above except providing the sensing element to be microwave or ultrasonic. Evans ('226) discloses a sensing system using microwave or ultrasonic waves. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the sensor element of Strand ('417) to be microwave or ultrasonic as taught by Evans ('226) since microwave and ultrasonic generate a greater number of beams/pulses and therefore improves the accuracy of detecting an object in a path.

The applicant's arguments have been considered but are not deemed persuasive. It appears that the applicant's arguments are more limiting than that of the claims. The applicant argues that the applicant's invention is a tubular support, which can even bend more than 90 degrees and spring back yet the applicant fails to provide this limitation in the claims. Furthermore, the applicant argues that Simmons fails to disclose words such as "flexible", "bend", and "bending"; but regardless, Simmons clearly shows a sensing element mounted such that bending and returning to its original shape is inherent and well understood. Still furthermore, it is well known that many elements are capable of bending and returning to its original shape, including the flexible support member of Simmons.

Any inquiry concerning this communication should be directed to Jerry Redman
at telephone number 703-308-2120.



Jerry Redman
Primary Examiner